

# ENGINEERING OPERATIONS COMMITTEE MEETING MINUTES MAY 1, 2008 – 9:00 A.M. MULTI-MODAL CONFERENCE ROOM

Present: L. Tibbits J. Friend J. Polasek

B. O'Brien J. W. Reincke M. Van Port Fleet

J. D. Culp C. Roberts C. Bleech

Absent: T. Kratofil T. Fudaly E. Burns

Guests: M. Azam J. Latham M. DeLong

R. Beckon P. Steinman B. Welke

R. Safford C. Libiran D. Calabrese (for T. Fudaly)

### **OLD BUSINESS**

1. Approval of the April 10, 2008, Meeting Minutes – L. Tibbits

The April 10, 2008, meeting minutes are approved.

### **NEW BUSINESS**

1. Work Zone Safety and Mobility Manual – R. Safford, J. Friend, T. Kratofil and P. Steinman

On September 9, 2004, the FHWA modified the Code of Federal Regulations creating Final Rule 32 CFT part 630, Subpart J, more commonly known as the Final Rule for Work Zone Safety and Mobility. This final rule required each state to develop a policy that requires all work zone activities to be in compliance with set mobility criteria. The compliance date for this final rule was October 12, 2007.

MDOT's Work Zone Safety and Mobility Policy was approved on September 1, 2007. The document states: "Specific processes, procedures, and guidelines to support implementation of this policy are being developed and will be communicated and distributed through a *Work Zone Safety and Mobility Manual*."

A Work Zone Safety and Mobility Team, with widespread department expertise, was established to develop the manual for design, construction, and maintenance operations. The final document has been reviewed and is now being submitted for approval.

**ACTION:** EOC approves the *Work Zone Safety and Mobility Manual*. Use of the manual for all MDOT design, construction, and maintenance operations will begin immediately. The Real Estate Division and the Local Agency Programs Section

are directed to continue working with the Work Zone Safety and Mobility Team to develop procedures for utilities and permits operations, and the local agency federal aid program. The compliance date for these two areas is January 1, 2009.

### 2. Adopt-A-Landscape Permits – M. DeLong

Individuals, governmental agencies, and corporate entities occasionally make requests for beautification of MDOT Right-of-Way (ROW), including tree trimming, vegetation replacement, planting, grading, landscaping and weed control. Current FHWA requirements do not allow permits for landscaping within limited access ROW. MDOT would like to develop a policy that allows Adopt-A-Landscape permits within MDOT ROW, including limited access ROW. Once a procedure is developed and approved by EOC, MDOT will work with the FHWA on receiving approvals for issuing permits for landscaping within limited access ROW.

**ACTION:** EOC endorses the development of procedures for issuing Adopt-A-Landscape permits in MDOT ROW, including limited access ROW.

## 3. Work Zone Safety and Mobility: Staging Typical Cross Sections – Design Detail – B. Welke and J. Gutting

This item is withdrawn.

### 4. Pavement Selection, I-196 Reconstruction: CS 41027, JN 75547 – B. Krom

The rehabilitation alternatives considered were a hot mix asphalt (HMA) (Alternative 1 – equivalent uniform annual cost [EUAC] \$288,163/directional mile) and a jointed plain concrete pavement (Alternative 2 - EUAC \$280,962/directional mile). A life cycle cost analysis was performed and Alternative 2 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

10.5"Non-Reinforced Concrete Pavement,	P1 Modified, with 14' joint spacing
6"	Aggregate Base, Modified
10"	Sand Subbase
6" dia	Underdrain System
26.5"	Total Thickness
Present Value Initial Construction Cost	
Present Value Initial User Cost	
Present Value Maintenance Cost	\$115,397/directional mile
Equivalent Uniform Annual Cost	\$280.962/directional mile

### 5. Proposed Roundabout at 5th Street and Riverview Drive on I-94BL, Benton Harbor, With ADA Pedestrian Access – CS 11013, JN 86206 – M. Azam

MDOT is proposing the reconstruction of 1.7 miles of I-94BL (Main Street) in the City of Benton Harbor, which includes the construction of two roundabouts. There is existing pedestrian traffic within the project.

The Southwest Region and Coloma TSC staff worked extensively with the local community and special interest groups for input related to the project design, including the intersection treatments within the project limits. During the early stages of design development, a design charette was conducted and resulted in a community vision for the corridor. The vision included the construction of roundabouts within the project limits. Particular attention was paid to the ADA requirements throughout the corridor.

Roundabouts were chosen by MDOT as the preferred alternative for improving the operation and increasing safety at two intersections within the project limits. The intersections are 5th Street/I-94-BL and Riverview Drive/I-94BL. A mitigation plan was developed to ensure the safe access of pedestrians in the roundabouts, and includes such features as truncated dome-type devices, ladder crosswalks, adequate width at the splitter-islands for pedestrian and wheelchair refuge, and contrasting pavement markings. Approval for the roundabout construction is requested.

**ACTION:** EOC approves the proposed roundabouts at 5th Street and Riverview Drive, and the proposed pedestrian facilities through these single lane roundabouts.

### 6. Work Zone Safety and Mobility: Bridge Freeway Shoulder Widths Issue Statement -M. Van Port Fleet

Current standard freeway and interstate bridge shoulder widths meet AASHTO standards, and are designed for consistency with roadway approach widths. Although they provide acceptable widths for the design speeds and traffic volumes, there is limited width available to accommodate future temporary maintenance of traffic during a construction project. Unlike the approach roadways, temporary widening is not a practical option. An increase in standard shoulder width would provide increased safety and mobility for future maintenance of traffic.

It is recommended that the following changes in bridge shoulder widths be adopted for bridge construction that meets 4R requirements:

- A. Increase the standard bridge shoulder width to 14 feet on 2-lane freeway new bridge construction, and for reconstruction (superstructure replacement and deck replacement).
- B. Require the new standard for bridge construction beginning with fiscal year 2013.
- C. Implement the new standard on a case-by-case basis for bridge construction scheduled before 2013.
- D. Require design exceptions for 4R bridge projects scheduled for fiscal year 2013 and beyond that will not be designed with the new standard shoulder width.

**ACTION:** EOC approves the recommendations as noted. The Design Division will develop standards/guides as needed.

(Signed Copy on File at C&T)

Brenda J. O'Brien, Secretary Engineering Operations Committee

#### BJO:kar

K. Steudle S. Mortel J. Steele (FHWA) cc: J. Shinn D. Jackson R. Brenke (ACEC) L. Hank W. Tansil G. Bukoski (MITA) D. DeGraaf (MCPA) **EOC Members** D. Wresinski **Region Engineers** C. Libiran D. Hollingsworth (MCA) TSC Managers R. J. Lippert, Jr. J. Becsey (APAM) Assoc. Region Engineers T. L. Nelson M. Newman (MAA) B. Ranck T. Phillips J. Murner (MRPA) M. DeLong K. Peters G. Naeyaert (ATSSA) B. Shreck C&T Staff J. Ingle